

GERMAN POPULATION MOVEMENTS

And Some Comparisons with Those of Other Countries

By Dr. CHRISTOPH TIETZE

In sending this article, Dr. Tietze asked us to add, wherever possible, comparable English figures. This we have done, taking them from the current Statistical Review of the Registrar-General. But the Christmas posts considerably delayed the arrival of the article from Vienna, and there was, therefore, not time to add such figures as had to be sought elsewhere. Our additions are set in italic type.—ED.*

IT is not such a long time since the German birth rate was one of the highest in Europe. The workers and peasants of the Reich had large families, to the great distress of the politicians and military men of France. During the second half of the nineteenth century the average birth rate was nearly 37 [per 1,000 living: *in England 33.4*]. There was a slight 'peak' in the seventies with the figure of 40.9 in 1876 [*In England the peak of 36.4 was reached in 1876*], due to the rise in industrialism in the newly-founded Empire; but natality soon returned to the norm. In 1900 the birth rate was still above 35 [*in England 28.7*]. Then a decline began, which soon could be called a fall. At the outbreak of the War the figure was 27 [*in England 23.1*]. After the War this rate was never reached again, and the fall continued more rapidly than before [*as in England*]. Today the birth rate of Germany has nearly caught up that of France, which is now a fairly stationary one. Table 1 compares the development of both rates during the twentieth century, and Table 2 (overleaf) gives the balance of births and deaths since the beginning of registration.

Comparing these figures, we have to bear in mind that the French birth rate was raised materially by the incorporation of

TABLE 1.—BIRTH RATES SINCE 1900.

Year	Germany	France	<u>Germany</u> France	England
1900	35.6	21.4	1.66	28.7
1905	33.0	20.6	1.60	27.3
1910	29.8	19.6	1.52	25.1
1913	27.5	18.8	1.46	23.1
1920	25.8	21.3	1.21	25.5
1925	20.7	18.9	1.10	18.3
1926	19.5	18.8	1.04	17.8
1927	18.4	18.2	1.01	16.6
1928	18.6	18.2	1.02	16.7

Alsace-Lorraine, and that the German territories ceded to Poland had a very high natality. But, on the other hand, we must not forget that the German population contains an extraordinarily high proportion of women of child-bearing age. If, therefore, we relate the number of births, not to the general population, but to the number of women between 15 and 45 or between 15 and 50, we find that the French birth rate is about 10 per cent. higher than the German.

A very accurate method of comparing the natality of different countries and periods has been introduced by R. R. Kuczynski. His "gross reproduction rate" compensates for differences in the sex and age constitution, and permits us to calculate the average number of girls born to each woman surviving the child-bearing period.

The number of children can be calculated by multiplying those figures by 2.06. The average German woman had more than five children half a century ago; she now has only two (see Table 3).

* *The Registrar-General's Statistical Review of England and Wales for the Year 1928* (New Annual Series, No. 8). London, 1929. Stationery Office. Part I, Medical, pp. 500, price 15s; Part II, Civil, pp. 131, price 5s.

TABLE 2.—CRUDE RATES OF BIRTHS AND DEATHS.*

PERIOD <i>pre-war territory.</i>	BIRTHS (per 1,000 living) GERMANY (pre-war territory)	ENGLAND	DEATHS (per 1,000 living) GERMANY (pre-war territory)	ENGLAND
1841-45 ...	36.7	32.3	26.0	21.4
1846-50 ...	35.6	32.8	27.5	23.3
1851-55 ...	34.6	33.9	27.1	22.7
1856-60 ...	36.0	34.4	25.6	21.8
1861-65 ...	36.8	35.1	26.0	22.6
1866-70 ...	37.5	35.3	27.7	22.4
1871-75 ...	39.0	35.5	28.3	22.0
1876-80 ...	39.2	35.3	26.1	20.8
1881-85 ...	37.0	33.5	25.8	19.4
1886-90 ...	36.5	31.4	24.4	18.9
1891-95 ...	36.3	30.5	23.3	18.7
1896-1900 ...	36.0	29.3	21.2	17.7
1901-05 ...	34.3	28.2	19.9	16.0
1906-10 ...	31.6	26.3	17.5	14.7
1911 ...	28.6	24.4	17.3	14.6
1912 ...	28.3	24.0	15.6	13.4
1913 ...	27.5	24.1	15.0	13.8
1913† ...	26.9	24.1	14.8	13.8
1920 ...	25.8	25.5	15.1	12.4
1921 ...	25.1	22.4	13.9	12.1
1922 ...	23.0	20.4	14.4	12.8
1923 ...	21.1	19.7	13.9	11.6
1924 ...	20.5	18.8	12.3	12.2
1925 ...	20.7	18.3	11.9	12.2
1926 ...	19.5	17.8	11.7	11.6
1927 ...	18.4	16.6	12.0	12.3
1928 ...	18.6	16.7	11.6	11.7

TABLE 3.—GROSS REPRODUCTION RATE.

Period	Germany	France	England
1881-90 ...	2.46	—	—
1891-1900 ...	2.37	—	—
1900-10 ...	2.13	—	—
1925 ...	1.13	—	—
1926 ...	1.07	1.15	1.05
1927 ...	1.00	1.10	.98

Mortality in Germany is very low to-day. In 1925 the expectation of life at birth was 56 years for boys and 58 years, 8 months for girls [*in England, boys 55.6, girls*

* Still-births excluded. † Present German territory.

59.6]* But that could not account for the death rate of 12 per 1,000 that has obtained during the last few years [*in England 11.6 to 12.3 per 1,000*]. The real cause for such a low rate—which would correspond to an average duration of life of more than eighty years—can only be found in an abnormal age constitution. There are few children and an excess of persons in middle life. This makes the natality appear deceptively high and the mortality deceptively low. Dr. Burgdörfer, from the statistical office in Berlin, gives the following figures for the year 1927 :

	Germany	England
Gross Birth Rate ...	18.4	16.6
Gross Death Rate ...	12.0	12.3
Rate of Natural Increase	+6.4	+4.3
Corrected Birth Rate ...	15.9	—
Corrected Death Rate ...	17.4	—
	-1.5	—

The present increase of the population is only a mechanical one, being due to the abnormal age constitution. A dynamic increase does not exist any more. The balance of births and deaths has become negative in Germany, as is also shown by Kuczynski's "net reproduction rate." It is now below zero in all the great countries of Western Europe, but in France it is higher than in Germany or England.

TABLE 4.—NET REPRODUCTION RATE.

Period	Germany	France	England
1881-90 ...	1.45	—	—
1891-1900 ...	1.51	—	—
1901-10 ...	1.48	—	—
1925 ...	0.95	—	—
1926 ...	0.89	0.94	0.88
1927 ...	0.83	0.91	0.82

The population of Germany will probably continue to increase until about 1950, when the age composition will be abnormal in another way. There will be few middle-aged persons and many old people. The death rate must rise; and the population will

* Year 1921—Dr. Tietze's own figures in last April's REVIEW, p. 44, q.v. for other relevant data.

first be stationary, and then will start to decline. [*Much the same movement has been authoritatively forecast, by similar calculations, in England: some even anticipate that the year 1940 will see the turn.*]

THE DIFFERENTIAL BIRTH RATE

The general birth rate of a great State gives only a very rough picture of the situation. If we want to know the causes of development and the powers below the surface we must study the differential birth rate. Otherwise our knowledge will only be a very superficial one.

A general family census has not yet been taken in Germany. Nevertheless, the statistical data available for smaller territories are sufficient to allow the following statements:

I. In all parts of Germany the birth rate is much higher in the rural districts than in the cities. In England such a difference does not exist; but Germany has a numerous peasantry, which England has not.

II. The natality of the large cities is very low, much lower than in England, France, or America. In 1928 there were eighteen towns with more than 100,000 inhabitants, where the birth rate was less than 14.

TABLE 5.—BIRTH RATE OF BIG TOWNS.

Berlin	... 9.8	Plauen	... 12.7
Dresden	... 11.4	Leipzig	... 12.9
Frankfort	... 12.0	Karlsruhe	... 13.0
Munich	... 12.4	Krefeld	... 13.1
Stuttgart	... 12.4	Elberfeld	... 13.2
Braunschweig	12.4	Magdeburg	... 13.3
Hannover	... 12.5	Wiesbaden	... 13.7
Barmen	... 12.5	Altona	... 13.8
Hamburg	... 12.7	Nurembergh	13.9

[*The English Quarterly Return (third quarter of 1929) of the Registrar-General gives the average birth rate during the last four quarters of 107 county boroughs and great towns as 16.8.*]

The births of non-resident mothers are not included in the figures. In Berlin the number of weddings is about twice as big as the number of first-born legitimate children—which means that every second marriage is childless. Big families are very

rare. [*English statistics do not distinguish between the first and later births.*]

III. The number of children is smallest among clerks and public officials, but large sections of the class-conscious urban proletariat are also limiting their offspring very strictly, e.g. the textile workers. Only the Catholic miners and iron-workers of the Rhineland and Westphalia still show a high fertility.

IV. The natality differences between rich and poor show a distinct tendency towards disappearing. In Berlin the process is practically completed (comp. the October issue of the *EUGENICS REVIEW*, p. 206), and in a number of other large towns it is nearly so. Probably very soon a differential birth rate will no longer exist in the German cities: all social strata will then have the same very low natality.

TABLE 6.—URBAN BIRTHS AND DEATHS.

German communities with more than 100,000 inhabitants	...	Birth rate	Death rate
50—100,000	..	13.6	10.6
30—50,000	..	16.1	10.3
15—30,000	..	16.2	10.1
less than 15,000	..	21.8	12.6
		18.6	11.6

[*Average rates of last four quarters in 107 English county boroughs and great towns—birth rate 16.8, death rate 13.1; 157 smaller towns—birth rate 16.1, death rate 12.5.*]

TABLE 7.—DIFFERENTIAL BIRTH RATE IN BREMEN.

	Births per 1,000 including still-born		
	1901	1910	1925
Districts:			
Wealthy	... 12.7	12.6	14.7
Medium	... 28.9	21.7	14.2
Poor	... 43.7	33.3	19.5
Social Classes:			
'Middle Class'	25.9	22.6	15.8
Employees	... 24.7	26.1	14.9
'Workers'	... 46.4	33.4	21.3
Total Average	32.8	26.8	17.3

(N.B.—'Middle Class' = liberal professions, merchants, artisans, etc. Employees = public officials, teachers, engineers, business clerks, foremen, etc. 'Workers' = skilled and unskilled.)

THE RISE IN THE ABORTION RATE

The number of abortions is enormous in Germany. An exact figure cannot, of course, be given, as most operations have to be performed secretly by midwives, quacks, or by the pregnant women themselves. But it is estimated by competent authorities to be between 600,000 and 800,000 a year, as against 250,000 before the War. As a result of the heavy economic pressure, large sections of the population, especially the majority of the urban proletariat, do not consider abortion criminal or immoral. The Social-Democratic Party is in favour of a thoroughgoing revision of the very rigorous § 218 in the penal code—in Austria it is § 144—and the Communists want to abolish it altogether. The § 218 has, indeed, no influence at all upon the number of abortions, and it has proved to be utterly useless as a brake on the declining birth rate; but it causes death or lifelong sickness to thousands of women every year, and brings mental and moral distress upon a still greater number. In Russia, where abortions are legalized and performed under sanitary conditions in the State hospitals, their number shows no tendency to increase, but health conditions and mortality have been considerably improved.

The abortion problem cannot, of course, be solved by mere legalization. The interruption of pregnancy, the killing of the unborn foetus, has to be made an unnecessary procedure by systematic care for mothers and children—a difficult task under present social and economic conditions—and by contraception propaganda. Efforts to advance in both ways are being made in Germany; and one may hope that the number of abortions has already reached its climax and will soon decline.

VENEREAL DISEASES

In 1927 a general census of venereal diseases was taken in Germany, and the main results are given below. They are supposed to be fairly reliable. All figures are annual morbidity rates per 10,000 of the population in question.

1. Venereal Diseases in Germany.

Acquired syphilis	11.9
Congenital „	1.2
Ulens molle	1.2
Gonorrhœa	43.6
Blennorrhœa	0.2
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Total	58.0

According to these figures the absolute number of syphilitic infections in Germany is about 80,000 every year. Gonorrhœa is three to four times as frequent.

2. Town and Country.

Communities of less than 20,000 inhabitants	...	...	...	29
20,000—100,000 inhabitants	...	...	...	77
more than 100,000 inhabitants	...	...	...	108

The highest rates were found in the great sea-ports (Hamburg 154, Altona 152, etc), and the lowest urban rates in the coal and iron centres of the West. In Berlin the rate was 130.

3. Incidence by Sex and Age.

Age				Males	Females
Below 1	...	...	...	36	39
1—14	...	...	...	3	7
15—19	56	57
20—24	271	119
25—29	256	81
30—34	156	50
35—39	92	26
40—49	47	14
50 and above	16	2
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All ages	82	35

SOME OTHER RELEVANT FACTS

Unfortunately, it has not been possible in several cases to supply English parallels to Dr. Tietze's figures. The English corrected birth and death rates cannot be

given, since we do not know by what standard Dr. Burgdörfer calculated those for Germany. Professor A. L. Bowley is one who has forecast a stationary and eventually declining population in England—if present

tendencies continue—and Kuczynski, already mentioned, is another.*

Even had time permitted, it would scarcely have been necessary to give English differential birth rates, since the only existing figures relate to 1921 or earlier, and the inverse correlation they exhibit between wealth and fertility is familiar to most people. It is not very likely that that inverse correlation has so far declined much, if at all, since the general birth rate is not yet nearly so low as in Berlin. That city, as mentioned in the October REVIEW (p. 206)† and Stockholm are the two European capitals with almost, if not quite, the lowest general birth rates. In Stockholm (according to Dr. Edin's figures in last January's REVIEW, pp. 258-66) the old inverse correlation between wealth and fertility is now positive, with the highest fertility among the wealthiest classes; while in Berlin there is perhaps a positive correlation, not yet between wealth and fertility, but between wealth and number of children surviving. As Dr. Tietze here indicates, other large German towns are following the lead of

Berlin, while Dr. Edin now reports further confirmatory evidence of his own and Dr. Tietze's data. He declares that the fertility of the most prosperous quarters of Hamburg has only declined 44 per cent. between 1903 and 1925, while that of the other quarters has fallen 60 per cent. during the period. To-day the fertility of all wives (15-45 years) in the prosperous quarters is 7 per cent. above expectation. Studies in Gothenburg indicate to him, too, that while the total fertility of the city is falling, the proportion of children born in the wealthiest group is beginning to exceed that in other groups.

Dr. Edin has been pursuing these investigations as a member of Commission 2 (on Differential Fertility, Fecundity, and Sterility) of the Population Union, and we are much indebted to him for permission to quote these facts from his records.

There are no English figures giving the number of abortions, though they are probably very much more numerous than most people imagine. Similarly, there are no reliable statistics of the incidence of venereal disease in England. Calculations from figures of conscripts indicated that in 1917-19 the proportion of men suffering from all forms of venereal disease was in the neighbourhood of 4 per 1,000.—ED.

* *The Balance of Births and Deaths*. London and New York, 1929. Allen & Unwin and the Macmillan Co. Pp. 140. Price 10s.

† Dr. Tietze's figures, *q.v.* for other relevant data.

